

Fig. 1--free running disc; 2--radial grooves; 3--bevelled lugs; 4--rigidly fastened disc; 5--edge of the groove; 6--bevelled edge of the lug; 7--ball

Card 3/3

SPG/EPA(a)-2/EWA(h)/EAT(a)/EWT...
Ps 1/Pt-7/Ps-6/Peb TT/AT

ACCESSION NR: AP5016779

UR/0286/65/0007010/0116/0106
621.83
629.13.01/06

AUTHOR: Abramovich, R. B.; Arinushkin, L. S.; Polynskiy, Y. M.; Gantman, A. M.;
Polynskiy, G. M.; Zhukov, Ye. P.; Mayenberg, I. M.

driven torus disks mounted on the unit is also equipped with intermediate rollers which are mounted on the unit.

Card 1/3

L 57795-65

ACCESSION NR: AP5016779

a control device; these provide interaction between the driver and the driven torus disks in transmitting rotation from the engine to the constant-rpm generator through a differential control mechanism and the generator gear train (see Fig. 1 of the Enclosure). Orig. art. has: 1 figure. [18]

ASSOCIATION: Organizatsiya gosudarstvennogo komiteta po aviatsionnoy tekhnike SSSR (Organization of the State Committee on Aviation Technology, U.S.S.R.)

SUBMITTED: 05May64

ENCL: 01

DISC. CODE: A

NO REF SOV: 000

OTHER: 000

ATD PRESS: 4041

BELYAYEVA, A.

Fur trade of Kamchatka. Geog.v shkole 19 no.1:20-23 Ja-F '56.
(Kamchatka--Fur trade) (MLRA 9:5)

BELYAYEVA, A.

One year later. NTO no.1:25-27 Ja '59.

1. Predsedatel' soveta pervichnoy organizatsii nauchno-tekhnicheskogo obshchestva sel'skogo i lesnogo khozyaystva sovkhosa imeni M. Gor'kogo. (NIRA 12:2)

(Moscow Province--Agricultural research)

LEZHANKINA, Z., kand.sel'skokhoz.nauk, starshiy nauchnyy sotrudnik
BELYAYEVA, A., agronom.

From experiments to high crop yields. NTO 3 no. 5:6-8 My '61.
(MIRA 14:5)

1. Nauchno-issledovatel'skiy institut ovoshchnogo khozyaystva
(for Lezhankina). 2. Zamestitel' predsedatelya soveta pervichnoy
organizatsii Nauchno-tehnicheskogo obshchestva, sovkhoz imeni
M.Gor'kogo Moskovskoy oblasti (for Belyayeva).
(Moscow Province--Vegetable gardening)

BELYAYEVA, A., agronom po zashchite rasteniy

Butterflies and moths as cabbage pests. Zashch. rast. ot vred.
i bol. 10 no.12:40-41 '65. (MIRA 19:1)

BELYAYEVA, A., agronom po. zashchite rasteniy.

Crucifer beetles and cabbage maggots. Zashch. rast. ot vred.
i bol. 10 no.9:42 '65. (MIRA 18:11)

BELYAYEVA, A. (g.Suny)

Although there is no club... Sov. profsoiuzy 19 no.7:21-22 Ap '63.
(Suny—Electric industry workers) (MIRA 16:4)

BELYAYEVA, A.A. (Obninsk, Kaluzhskoy oblasti, bul'var Entuziastov, d.15,kv.22)

fibrocalcinosgranulomatosis. Ortop., travm. i protez. 25 no.3:74-77
Mr. '64. (MIRA 18:3)

1. Iz otdeleniya kostnoy patologii (zav. - prof. V.Ya.Shlapoberskiy)
TSentral'nogo instituta travmatologii i ortopedii (dir. - chlen-
korrespondent AMN SSSR prof. M.V.Volkov).

BELYAYEV, I.N.; BELYAYEVA, A.G.

System Na_2TiO_3 - NaCl - TiO_2 . Zhur. neorg. khim. 10

no.2:467-471 F '65.

(MIRA 18:11)

1. Submitted July 18, 1963.

BELYAYEV, I.N.; BELYAYEVA, A.G.

Study of the system K_2TiO_3 - KCl - TiO_2 . Zhur.prikl.khim. 38
no.6:1280-1284 Ja '65.

(MIRA 18:10)

BEZYAYEVA, A.G.

Experimental work in collective farm fields. Politekh. obuch.
no.9:41-42 S '58. (MIRA 11:10)

- 1. Srednyaya shkola No.1 g.Lugi, Leningradskoy oblasti.**
(Agriculture—Experimentation)

ALEKSANDRIYSKIY, M.V.; BELYAYEVA, A.G.; MAKSHOV, S.I.

Clinical statistical analysis of the treatment of fractures of the large tubular bones for five years. Trudy Vor. med. inst. 52:227-231 '63.

late results of a compound treatment of fresh fractures of the large tubular bones. Ibid.:233-236

(MIRA 18:3)

RELEVANT, ~~SECRET~~ ~~SECRET~~

A. I.

USSR/Medicine - Influenza, Prevention
Medicine - Antibiotics

Sep 48

"Experimental Application of Antibiotics as a
Prophylaxis Against Grippe," I. I. Yenkel, ~~L. K. A. I.~~
Belyayeva, M. L. Rubtsova, M. L. Turits, S. I. Eydel'-
shteyn, Inst Biol Prophylaxis of Infections, 1 $\frac{1}{4}$ pp

"Sov Med" No 9

Use of Lysozyme produced positive results. States
that treatment must be started during initial stage
of disease. Use of native streptomycin and erythrin
under similar circumstances did not give satisfactory
results.

24/49T64

Country : USSR
 Category : Microbiology. Antibiosis and Symbiosis. Antibiotics.
 Abs. Jour : Ref Zhur-Biol., No 23, 1958, No 105733
 Author : Belyayeva A.I.
 Institut. : --
 Title : Rapid Method of Determination of Chlortetracycline Activity (By Way of Exchange of Experience)
 Orig. Pub. : Antibiotiki, 1957, 2, No 4, 35-37
 Abstract : Supervision of the activity of chlortetracycline by the rapid method is accomplished in Petri dishes with two layers of agar: the lower layer consists of 2% agar on a phosphate buffer with a pH of 6.8-7.0; the upper one, of 1-1.2% agar, with 135 mg% of amine nitrogen (yeast digest à la Hottinger) and 1% glucose. The upper layer is seeded with 40-50 million bacillary spores of the mycoides type per cubic centimeter of nutrient agar. Incubation is carried out at 40° for the first hour, and then at 37° for three hours. This method shortens the time needed for determination of activity by 13 hours and produces only a slight (±5, ±10%) divergence from the generally-accepted biological method--S. P. Shapovalova.
 Card:

1/1

5-31

BELYAYEVA, A.I.; AVERINA, I.A.

Determination of pyridoxine by the microbiological method.
Lab.delo 7 no.7:22-23 JI '61. (MIRA 14:6)

1. Kafedra propedevticheskoy terapii I Moskovskogo ordena Lenina
meditsinskogo instituta imeni I.M.Sechenova.
(PYRIDOXINE)

BELYAYEVA, A. I. Editor

"Russian Scientists in Non-Ferrous Metallurgy," Moscow, 1950. 208 pages.

Evaluation B-82959

CHEKHOVOSTOVA, Ye.V.; STARSHINOVA, V.S.; SMIRNOVA, M.A.; BELYAYEVA, A.I.

Conditions of the formation of typhoid antibodies of various
physicochemical nature. Zhur.mikrobiol., epid. i immun. 42
no.2513-19 F '65.

(MIRA 18:6)

1. Moskovskiy institut epidemiologii i mikrobiologii, I Moskovskiy
ordena Lenina meditsinskiy institut i Moskovskaya gorodskaya
sanitarno-epidemiologicheskaya stantsiya.

AUTHORS: Morachevskiy, Yu. V., Belyayeva, A. I., Ivanova, L. V. SOV/75-13-5-11/24

TITLE: Separation of Uranium and Vanadium (K voprosu o razdelenii urana i vanadiya)

PERIODICAL: Zhurnal analiticheskoy khimii, 1958, Vol 13, Nr 5, pp 570-575 (USSR)

ABSTRACT: For the separation of uranium and vanadium various methods are known (Refs 1-4). Many of them, however, give but an incomplete separation; especially in nearly neutral solutions the separation does not proceed completely. This fact leads to the conclusion that uranium and vanadium react with one another under these conditions. This conception is confirmed by the existence of uranovanadates in natural minerals and by the smoothly proceeding synthesis of uranovanadates in aqueous solutions. In a previous paper (Ref 5) the authors had proved that pentavalent vanadium forms with hexavalent uranium in aqueous solution the complex uranovanadate-anion. The corresponding acid is as well as its salts but little dissociated in water and precipitates already in concentrations of $5 \cdot 10^{-5}$ g-ion/l. The composition of this precipitate varies with the

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Separation of Uranium and Vanadium

SOV/75-13-5-11/24

change of the concentration ratio U:V in the solution. In order to attain a complete formation of the complex anion the precipitates were analyzed not before 24 hours after the combination. Since it is possible to synthesize compounds with a small ratio U:V whereat the share of vanadium is not an integer it can be concluded that one by one all OH-groups in the complex are substituted by metavanadate-anions VO_3^- . In dependence on the ratio U:V in the initial solution the precipitate is formed from one of the three following complex anions: Uranyl trimetavanadate $[\text{UO}_2(\text{VO}_3)_3]^-$; uranyl hydroxodimetavanadate $[\text{UO}_2(\text{OH})(\text{VO}_3)_2]^-$; uranyl dihydroxometavanadate $[\text{UO}_2(\text{OH})_2\text{VO}_3]^-$. This assumption is in good accord with the composition of the natural uranovanadates. It is important when searching methods for the separation of uranium and vanadium to know the values for the solubility of these uranovanadates and the limits of the pH-values within which they remain stable. The present paper deals with these questions. Since it is practically impossible to separate the free complex acids from

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Separation of Uranium and Vanadium

SOV/75-13-5-11/24

the solutions in which they are formed, their ammonium salts were isolated for the investigation of the solubility. It was found that the uranovanadic acids precipitate at pH 2,2-6,5. In this pH-range the composition of the precipitate does not depend on the H^+ -ion concentration. It was seen that the formation of the ammonium uranyl trimetavanadate proceeds very slowly. With uranium concentrations of $5 \cdot 10^{-4}$ g-atom/l and a threefold excess of vanadium this process is terminated at room temperature only after 3 months. Heating the solutions up to boiling this increases the formation velocity of the uranyl trimetavanadate to a considerable degree. The solubilities of $NH_4[VO_2(OH)_2VO_3]$, $NH_4[VO_2(OH)(VO_3)_2] \cdot 1,5 H_2O$ and $NH_4[VO_2(VO_3)_3] \cdot 3,5 H_2O$ were determined and are given. They are within the magnitude of the solubility of the silverhalogenides. Conditions are given under which the best separation of U(VI) and V(V) is to be expected. There are 8 tables and 6 references, 5 of which are Soviet.

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Separation of Uranium and Vanadium

SOV/75-13-5-11/24

ASSOCIATION: Leningradskiy gosudarstvennyy universitet im. A. A. Zhdanova
(Leningrad State University imeni A. A. Zhdanov)

SUBMITTED: July 1, 1957

Card 4/4

EREMENKO, V.V.; BELYAYEVA, A.I.

Characteristics of the absorption spectrum of manganese fluoride crystals. Fiz. tver. tela 5 no.10:2877-2884 O '63. (MIRA 16:11)

1. Fiziko-~~tekh~~nicheskii institut nizkikh temperatur AN UkrSSR, Khar'kov.

BELYAYEVA, A.I.; YEREMENKO, V.V.

Temperature dependence of the width of the optical absorption bands in MnF_2 crystals. Zhur. eksp. i teor. fiz. 44 no.2:469-471 F '63. (MIRA 16:7)

1. Fiziko-tekhnicheskiy institut nizkikh temperatur ANUKrSSR.

ACCESSION NR: AP4019210

S/0056/64/046/002/0488/0491

AUTHORS: Belyayeva, A. I.; Yeremenko, V. V.

TITLE: Effect of antiferromagnetic ordering on the optical absorption spectrum in manganese carbonate crystals

SOURCE: Zhurnal eksper. i teor. fiz., v. 46, no. 2, 1964, 488-491

TOPIC TAGS: magnesium carbonate, magnesium carbonate crystal, light absorption spectrum, antiferromagnetic ordering, optical absorption spectrum, antiferromagnetic ordering, optical absorption spectrum, Neel temperature, manganese fluoride, exchange interaction, optical band broadening, temperature frequency shift

ABSTRACT: To check on the universality of the influence of antiferromagnetic ordering previously discovered by the authors (ZhETF 44, 469, 1963), similar investigations were carried out on the absorption spectra of $MnCo_3$, which has different crystalline and fer-

Card

1/42

ACCESSION NR: AP4019210

romagnetic structures. The absorption spectra were obtained at temperatures from 4 to 300K, the absorption intensity being measured by photographic photometry. The optical absorption spectrum of MnCo_3 crystals was found to be very similar to that of MnF_2 crystals, with narrow bands observed due to the transitions ${}^6S_{5/2} \rightarrow {}^4G_{3/2}$, ${}^4D_{3/2}$ and ${}^4P_{3/2}$ in the Mn^{2+} ion. All the observed MnF_2 bands are shifted by approximately the same amount towards the ultraviolet relative to the corresponding MnCo_3 bands. The frequency shift of all the optical bands increases on approaching the Neel point. The ${}^6S_{5/2} \rightarrow {}^4D_{3/2}$ band narrowed down appreciably on cooling below the Neel temperature (29.4K), thus indicating that the observed anti-ferromagnetic ordering is a universal effect. The lack of anomaly in the temperature dependence of the bandwidths of the other transitions might have been due to a complex structure, which could not be

Cord, 2/4

ACCESSION NR: AP4041694

S/0181/64/006/007/1967/1974

AUTHORS: Yeremenko, V. V.; Belyayeva, A. I.

TITLE: Features of the spectrum of light absorption by manganese carbonate crystals near the Neel temperature

SOURCE: Fizika tverdogo tela, v. 6, no. 7, 1964, 1967-1974

TOPIC TAGS: manganese alloy, antiferromagnetism, optical spectrum, absorption band, frequency shift

ABSTRACT: Continuing an earlier effort (V. V. Yeremenko, A. I. Zvyagin, FTT v. 6, 1013) to clarify the factors that mask the influence of antiferromagnetic ordering on the optical spectrum, the authors investigated the absorption spectrum of MnCO_3 crystals, since these differ from all other antiferromagnetic crystals previously investigated both in their crystallographic and their magnetic structures. The tests were made at 7000--2500 Å and 400--4.2K.

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ACCESSION NR: AP4041694

Particular attention was paid to the frequency shift, and to the shape and intensity of the bands as the MnCO_3 crystal was cooled below the Neel temperature (29.4K). It was observed that all the investigated absorption bands connected with the optical transitions ${}^6\text{S}_{5/2}({}^6\text{A}_{1g}) \rightarrow \{ {}^4\text{G}({}^4\text{E}_g, {}^4\text{A}_{1g}), {}^4\text{D}({}^4\text{T}_{2g}), {}^4\text{D}({}^4\text{E}_g), \text{ and } {}^4\text{P}({}^4\text{T}_{1g}) \}$ in the third shell of the Mn^{++} ion begin to shift rapidly to the short-wave region of the spectrum on approaching the Neel temperature. The value of the shift is close to the value of the Zeeman splitting of the ground state level ${}^6\text{S}_{5/2}({}^6\text{A}_{1g})$ in an exchange field $H_E \approx 3 \times 10^5$ Oe. The temperature dependence of the half-width of the observed bands is made complicated either by the doublet structure of the transitions, or by interaction with the phonons. In the case of the D and F bands, a noticeable change in the temperature dependence is observed near the Neel temperature, where the asymmetry of the bands also increases markedly. The

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ACCESSION NR: AP4041694

anomaly in the temperature dependence of the frequency shift is approximately the same for all observed absorption bands. The peculiarities of the spectrum due to the antiferromagnetic ordering are discussed. "The authors thank corr. member of AN UkrSSR B. I. Verkin and Professor A. S. Borovik-Romanov for continuous help and support." Orig. art. has: 8 figures and 1 table, and 1 formula.

ASSOCIATION: Fiziko-tekhnicheskii institut nizkikh temperatur AN UkrSSR, Khar'kov (Physicotechnical Institute of Low Temperatures, AN UkrSSR)

SUBMITTED: 24Sep63

ENCL: 00

SUB CODE: EM, OP

NR REF SOV: 007

OTHER: 011

Card 3/3

L 18244-65 EWT(1)/EPA(s)-2 Pt-10 IJP(c)/ESD/ASD(a)-5/AFETR/AS(mp)-2/
APGC(b)/SSD/AFWL/RAEM(a)/SSD(c)/RAEM(j)/ESD(gs)/ESD(t) CG
ACCESSION NR: AP5000665 S/0181/64/006/012/3646/3652

AUTHORS: Yeremenko, V. V.; Belyayeva, A. I.

TITLE: Optical absorption spectra of crystals of antiferromagnetic
cobalt compounds

SOURCE: Fizika tverdogo tela, v. 6, no. 12, 1964, 3646-3652

TOPIC TAGS: cobalt compound, optical absorption, absorption spec-
trum, single crystal, antiferromagnetism, polarization, ordered
structure

ABSTRACT: The absorption spectra of single crystals of CoF_2 and
 CoCO_3 were investigated in the spectral range from 5500 to 3000 Å
at temperatures from room temperature down to 4.2K. The procedure
was analogous to that described earlier (FTT v. 5, 2877, 1963). The
 CoF_2 single crystals were grown at the Institut fizicheskikh problem
AN SSSR from a melt in platinum crucibles in an atmosphere of

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L 18244-65

ACCESSION NR: AP5000665

hydrogen fluoride. The CoCO_3 were grown by the hydrothermal method at the Institut kristallografii AN SSSR. Samples in the form of small plates were cut from both types of crystals. The authors identified the absorption bands due to the transitions in the unfilled 3d shell of the Co^{2+} ion in a cubic intracrystalline field. Details of the structure of the spectra and polarization effects are described. The influence of antiferromagnetic ordering on the spectrum is discussed. It is shown that antiferromagnetic ordering will not cause a radical shift of the absorption bands for the spin-conserving transition (B-band in CoCO_3) only if the exchange integral in the excited state differs little from that of the ground state.

"The authors thank N. N. Mikhaylov, S. V. Petrov, and N. Yu. Iskornikova for supplying the CoF_2 and CoCO_3 single crystals, and corresponding member of AN UkrSSR E. I. Verkin and Professor A. S. Borovik-Romanov for continuous interest in the work. Orig. art. has: 8 figures.

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L 18244-65

ACCESSION NR: AP5000665

ASSOCIATION: Fiziko-tehnicheskii institut nizkikh temperatur AN
UkrSSR, Khar'kov (Physicotechnical Institute of Low Temperatures,
AN UkrSSR)

SUBMITTED: 06Apr64

ENCL: 00

SUB CODE: SS

NR REF SOV: 011

OTHER: 007

Card 3/3

BELYAYEVA, A.I.; YEREMENKO, V.V.

Effect of antiferromagnetic ordering on the spectrum of
light absorption by manganese carbonate crystals. Zhur.
eksp. i teor. fiz. 46 no.2:488-491 F '64. (MIRA 17:9)

1. Fiziko-tekhnicheskii institut nizkikh temperatur AN UkrSSR.

YEREMENKO, V.V.; BELYAYEVA, A.I.

Optical absorption spectra of crystals of antiferromagnetic
cobalt compounds. Fiz. tver. tela 6 no.12:3646-3652 D '64
(MIRA 18:2)

1. Fiziko-tehnicheskiiy institut nizkikh temperatur AN UkrSSR,
Khar'kov.

YEREMENKO, V.V.; BELYAYEVA, A.I.

Characteristics of the spectrum of absorption of light by manganese carbonate crystals near the Neel point. Fiz. tver. tela 6 no.7:1967
1974 J1 '64. (MJRA 17:10)

1. Fiziko-tehnicheskii institut nizkikh temperatur AN UkrSSR, Khar'kov.

44, 55 44, 55 44, 55
AUTHORS: Yeremenko, V. V.; Belyayeva, A. I.; Marisova, S. V.

TITLE: On the nature of the structure of the long-wave absorption edge of light in crystals of mercury iodide

44, 55 44, 55 44, 55
SOURCE: Optika i spektroskopiya, v. 18, no. 5, 1965, 820-824

TOPIC TAGS: mercury compound, manganese compound, absorption edge, light absorption, absorption spectrum

ABSTRACT: The authors investigated the absorption spectra of light in the crystals HgI_2 and MnCl_2 , and in the solid solutions $\text{HgI}_2(\text{X})$ - $\text{CdI}_2(1 - \text{X})$ and $\text{MnCl}_2(\text{X})$ - $\text{CdCl}_2(1 - \text{X})$ at 20.4K. The purpose of the investigation was to obtain more details on the mechanism of photoconductivity and luminescence of the HgI_2 crystals, and especially to clarify the mechanisms of long-wave absorption of HgI_2 by inves-

Card 1/3

modification with the spectra of the vapor. The light source was a high power discharge lamp with an intense continuous spectrum. The spectra were photographed with prism spectrographs. The crystals were grown by cooling a drop of melt in a special quartz cuvette which yielded samples of specified thickness. The tests show that the electron transitions causing the long-wave absorption in the crystals of the low-temperature red modification of HgI_2 are not localized within a single cell. This is evidenced by the absence of any similarity with the optical absorption spectrum of HgI_2 vapor and the sharp influence of the phase transition (at 1.30) on the spectrum. The weak broadening of the absorption band following the introduction of impurities CdI_2 apparently signifies that the radius of the corresponding excited state is sufficiently large to average out the inhomogeneity of the structure. The absorption of light in

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L 64507-65

L 1563-66

ACCESSION NR: AP5019215

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 accompanied by an anomalous shift of the optical absorption bands of the added Mn^{2+} and Co^{2+} towards the shorter waves, together with a pronounced narrowing which is of the same order as for the band of pure MnF_2 and CoF_2 crystals. The absorption lines of Ho ions are not affected by the antiferromagnetic transition of MnF_2 . "We thank P. L. Kapitza for his interest, A. S. Borovik-Romanov for a discussion of the results, and V. A. Timofeyev for providing the $Ho_3Al_5O_{12}$ single crystals." Orig. art has: 5 figures and 2 tables.

ASSOCIATION: Institut fizicheskikh problem Akademii nauk SSSR (Institute of Physics Problems, Academy of Sciences, SSSR); Fiziko-tekhnicheskiy institut nizkikh temperatur Akademii nauk Ukrainской SSSR (Physicotechnical Institute of Low Temperatures, Academy of Sciences, UkrSSR) 44.55

SUBMITTED: 28 Jan 65

NR REF SOV: 015

ENCL: 00

OTHER: 009

SUB CODE: SS

Card 2/2

L 23028-66 EWT(1)/EWT(m)/T IJT(c) JD/HW

ACC NR: AP6009660

SOURCE CODE: UR/0181/66/008/003/0783/0787

AUTHORS: Pisarev, R. V.; Belyayeva, A. I.; Syrnikov, P. P. 64

ORG: Institute of Semiconductors, AN SSSR, Leningrad (Institut poluprovodnikov AN SSSR) 61

TITLE: Structure of energy levels and exchange interaction of Co²⁺ ions in NaCoF₃ 27

SOURCE: Fizika tverdogo tela, v. 8, no. 3, 1966, 783-787

TOPIC TAGS: energy band structure, cobalt compound, single crystal, light absorption, optic transition, line shift

ABSTRACT: The authors investigated the spectrum of optical absorption of NaCoF₃ in the interval from 5,000 to 30,000 cm⁻¹ (2 -- 0.33 μ). 21

The single crystals were obtained by chemical reaction of NaCl with CoF₂. The experiments were made in tightly sealed platinum crucibles.

The absorption spectra were investigated in the ultraviolet and 2

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L 23028-66

ACC NR: AP6009660

visible regions using diffraction spectrographs (DFS-8 and DFS-12) and a double prism monochromator (DMR-4). The measurements were made at 4.2, 20.4 -- 60, 77, and 295K. The observed absorption bands are identified with transitions inside the 3d electron shell of the Co^{2+} ion in a cubic crystalline field. It is shown that near 35K one of the absorption lines is strongly shifted, owing to the transition of the NaCoF_2 into a magnetically-ordered state. It is observed that at low temperatures the state $^2\text{E}(^2\text{H})$ splits into two lines ($\Delta\nu = 36 \text{ cm}^{-1}$), one of which disappears when the temperature is raised to 60K. The possibility that this splitting is due to exchange interaction between the paramagnetic ions is discussed, although the data obtained so far do not prove this completely. The authors thank G. A. Smolenskiy for interest in the work and a discussion of the results, V. V. Yeremenko for a discussion of the results, and E. V. Matyushkin for help with the measurements. Orig. art. has: 4 figures, 2 formulas and 1 table.

SUB CODE: 20/ SUBM DATE: 24Jul65/ ORIG REF: 002/ OTH REF: 005

Card

2/2

L 40172-66 P.T(1) IJP(c) GG/M

ACC NR: AP6020200

SOURCE CODE: UR/0056/66/050/006/1472/1477

AUTHOR: Belyayeva, A. I.; Yeremenko, V. V.; Mikhaylov, N. N.; Pavlov, V. N.;
Petrov, S. V.

ORG: Physicotechnical Institute of Low Temperatures, Academy of Sciences, Ukrainian
SSR (Fiziko-tehnicheskiiy institut nizkikh temperatur Akademia nauk Ukrainskoy SSR);
Institute of Physical Problems, Academy of Sciences, SSSR (Institut fizicheskikh
problem Akademii nauk SSSR)

TITLE: Magnon and phonon excitation during light absorption in antiferromagnetic
NiF₂

SOURCE: Zh Eksper i teor fiz, v. 50, no. 6, 1966, 1472-1477

TOPIC TAGS: magnon, phonon, magnon excitation, phonon excitation, light absorption,
nickel fluoride, antiferromagnetic material, *NICKEL COMPOUND, FLUORIDE;*
ABSORPTION SPECTRUM, ELECTRON TRANSITION, LIGHT EXCITATION

ABSTRACT: The structure of the $^3A_{2g} + ^1T_{2g}$ transition in the absorption spectrum of
antiferromagnetic nickel fluoride at temperatures between 4.2 and 77K has been
analyzed on the basis of experimental data on its vibrational frequencies. It has
been shown that band $\nu_I = 20,622 \text{ cm}^{-1}$ and band $\nu_{II} = 20,717 \text{ cm}^{-1}$ are due to electron-
magnon transitions with the formation of one and two magnons, respectively, with
maximum frequencies. The maximum frequency of the magnon $\nu_m = 100 \text{ cm}^{-1}$. The magnon

Card 1/2

ACC NR: AP6020200

nature of band ν_1 has been confirmed by an analysis of its shape, temperature dependence of spectral position, and half-width. Orig. art. has: 5 figures, 1 formula, and 1 table. [Based on authors' abstract] [NT]

SUB CODE: 20/ SUBM DATE: 13Jan66/ ORIG REF: 002/ OTH REF: 005

Card: 2/2 *MLP*

ACC NR: AP6037000

(A, N)

SOURCE CODE: UR/0181/66/008/011/3397/3400

AUTHOR: Antonov, A. V.; Belyayeva, A. I.; Yermenko, V. V.

ORG: Physicotechnical Institute of Low Temperatures, AN UkrSSR, Khar'kov (Fiziko-tekhnicheskii institut nizkikh temperatur AN UkrSSR)

TITLE: Low temperature anomaly in the absorption spectra of antiferromagnetic RbMnF_3 and KMnF_3

SOURCE: Fizika tverdogo tela, v. 8, no. 11, 1966, 3397-3400

TOPIC TAGS: absorption spectrum, antiferromagnetic material, Neel temperature, temperature dependence, low temperature research, line splitting, luminescence spectrum

ABSTRACT: This is a continuation of earlier work (FTT v. 6, 3646, 1964 and preceding) and is devoted to the C-group ($\sim 3900 \text{ \AA}$) of bands in the absorption spectrum of antiferromagnetic RbMnF_3 (Neel temperature $T_N = 82\text{K}$) and KMnF_3 ($T_N = 88\text{K}$), whose structure becomes quite complicated at $T < T_N$. The measurement procedure was described earlier (FTT v. 6, 1967, 1964). Investigations were made at 4.2 - 200K. The absorption spectrum was photographed with a diffraction spectrograph (DFS-8) and then photometrized (MF-2 microphotometer). The results show that with decreasing temperature the number of bands in the C group increases from two to seven in the case of RbMnF_3 and six in the case of KMnF_3 , in analogy with the splitting observed for other antiferromagnetic crystals. The temperature dependence of the most intense of the bands was also investigated and the connection between the anomalies in the absorp-

Card 1/2

ACC NR: AF6037000

tion spectrum and the anomalies in the luminescence spectrum of RbMnF_3 and KMnF_3 is discussed. It is deduced that the anomaly in the absorption spectrum, observed by the authors for the first time, can also be related to the ordering of the spins of the excited Mn^{++} ions. Particular attention is paid to the temperature dependence of the first band to appear with decreasing temperature (C_2), which exhibits an anomaly below 30K, and which is a magnon satellite of one of the original bands (C_1). Orig. art. has: 2 figures and 1 table.

SUB CODE: 20/ SUBM DATE: 23May66/ ORIG REF: 004/ OTH REF: 008

Card 2/2

DOTSENKO, T.K.; SURCHAKOV, A.V.; BELYAYEVA, A.M.; KOROTOVSKAYA, N.T.;
GOLUBYATNIKOV, F.I.; KOZLOVA, M.F.

Use of new insecticides in controlling synanthropic flies
in nonisolated sectors. Med.paraz.i paraz.bol. no.3:355-
359 '62. (MIRA 15:9)

1. Iz Kuybyshevskogo nauchno-issledovatel'skogo instituta
epidemiologii, mikrobiologii i gigiyeny (dir. K.P. Vasil'yev),
Gorodskoy sanitarno-epidemiologicheskoy stantsii (glavnyy
vrach A.A. Galaktionova, zav. parazitologicheskim otdelom
N.T. Korotovskaya) i Gorodskoy dezinfektsionnoy stantsii (zav.
M.F. Kozlova).

(FLIES--EXTERMINATION) (INSECTICIDES)

L 1964-66 ENT(m)/ENP(j) RM

ACCESSION NR: AP5021783

UR/0068/65/000/008/0039/0042
668.74

AUTHOR: Novikov, Ye. G.; Aksenova, T. F.; Belyayeva, A. M.

TITLE: Preparation and properties of carbazole-phenol-formaldehyde resins

SOURCE: Koks i khimiya, no. 8, 1965, 39-42

TOPIC TAGS: carbazole, formolite resin, formaldehyde, heat resistant plastic

ABSTRACT: Hydrocarbon - phenol-formaldehyde resins (formolites) based on carbazole were synthesized in two steps: condensation of carbazole with formaldehyde in an alkaline medium produced the low-melting and reactive N-methylolcarbazole, and the latter was then condensed with formaldehyde in an acid medium. The conditions of preparation of N-methylolcarbazole were studied by ultraviolet spectroscopy. It was found that in order to obtain the formolite, the raw material used may be commercial carbazole with a concentration not below 85% containing no more than 3% phenanthrene. The synthesis of the carbazole-phenol-formaldehyde resins consisted in filling the reactor with 1 pt. by wt. of the formolite, 2 pts. by wt. of phenol, and formalin, the required amount of which was determined by preliminary analysis. The catalyst

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L 1964-66

ACCESSION NR: AP5021783

(hydrochloric acid) was introduced in portions, the condensation was carried out for 3 hr, then the resin was dried. The resins were used to prepare molded articles. Orig. art. has: 7 tables.

ASSOCIATION: VUKHIN

SUBMITTED: 00

ENCL: 00

SUB CODE: .GC, MT

NO REF SOV: 001

OTHER: 000

Card 2/2

DP

NEVMERZHITSKAYA, E.A.; BELYAYEVA, A.N.; POPROTSKAYA, V.A.; KUDRYAVTSEVA, E.A.

Studying the composition of gas from methane electrocracking.
Khim. prom. 41 no. 12:895-896 D '65 (MIRA 19:1)

A.P. POLYAKOVA

Gen/Oct 48

USSR/Medicine - Poliomyelitis
Medicine - Infection, Experimental

"Poliomyelitis; I, Disease in Monkeys, Caused by Moscow and Riga Virus Strains,"
M.K. Voroshilova, M.P. Chumankov, A.P. Polyakova, T.A. Shutova, Soc of Neuroviruses, Inst
Of Neurol, Acad Med Sci USSR, 5 pp

"Neuropatol i Psihiat" Vol XVII, No 5

Describes infection of monkeys with filtrates obtained from human poliomyelitic victims
with five diagrams, and two photographs. Submitted 2 April 48.

PA 23/49T85

BELYAYEVA, A. P.

CHUMAKOV, M.P., A.P. BELYAYEVA, AND S.G. DROZDOVA

"On the Nature of the So-called Two-Wave Milk Fever and Its Connections with the Tick-Transmitted OGL (Omsk Hemorrhagic Fever), Tick (Spring-Summer) Encephalitis, and Scotch Tick Encephalitis of Sheep" by M.P. Chumakov, A.P. BELYAYEVA, and S.G. Drozdova.

W-31019, July 54, # 26 Oct 54

BELYAYEVA, A. P.
USSR/Medicine - Q-Fever

FD 153

Card 1/1

Author : Chumakov, M. P.; Belyayeva, A. P.; Shifrin, I. A.; Khodukin, N. I.;
and Lysunkina, V. A.

Title : The study of Q-fever in the USSR. I. Data on the Identification of
Q-fever infections.

Periodical : Zhur. mikrobiol. epid. i immun. 5, 40-48, May 1954

Abstract : By preparing a highly active specific antigen of R. burnetti and using
it to carry out complement fixation and agglutination reactions, Q-fever
was detected in a number of oblasts in the USSR. Q-fever was also identi-
fied etiologically by isolating strains of R. burnetti from the blood
of persons suffering from a typical fever, and from the ticks, Hyalomma
anatolicum. The investigations are illustrated by 4 charts, a graph and
a microphotograph. Many other persons working on Q-fever are mentioned,
but no references are cited.

Institution :

Submitted : July 21, 1953. Presented at a scientific conference of the Institute
of Virology of the Academy of Medical Sciences USSR, December 1, 1952.

BELYAYEVA, A. P.

"Study of Pathogenic Virus of Omsk Hemorrhagic Fever." (Dissertation for Degree of Candidate of Medical Sciences) Acad Med Sci USSR, M_oscow, 1955

SO: M-1036 28 Mar 56

PELYAYEVA, A. P., CHURIAKOV, M. P., MYASNIKOV, YU. A., LESHCHINKOVA, E. V.,
FOVLETSKAYA, T. P., LEVYKSEYAN, E. P., SYTEBN, I. A., GEFLOCHETS, K. A.,
LEONAROVA, G. A., GOLIKOV, K. K., ARKHANGEL'SKIY, A. A.

"New data on the Tula fever with a renal syndrome, and the natural
reservoirs of this infection." p. 124

Desyatoye soveshchaniye po parazitologicheskim problemam i prirodnoochagovym
boleznyam. 22-29 Otiyabrya 1959 g. (Tenth Conference on Parasitological
Problems and Diseases with Natural Foci 22-29 October 1959), Moscow-Leningrad,
1959, Academy of Medical Science USSR and Academy of Sciences USSR, No. 1 254pp.

BELYAYEVA, A.P.

BALAYAN, M.S.; BELYAEVA, A.P.; SEIBIL, V.B.

Use of the precipitin test in the diagnosis of infections caused by ECHO and Coxsackie viruses. Actavirol. 7 no.3:241-249 My '63.

1. Institute of Poliomyelitis and Viral Encephalitides, U.S.S.R.
Academy of Medical Sciences, Moscow.

(ECHO VIRUSES) (ENTEROVIRUS INFECTIONS) (DIAGNOSIS)
(COXSACKIE VIRUS INFECTIONS) (PRECIPITIN TESTS)

TSUKER, M.B.; VOROSHAILOVA, M.K.; LESHCHINSKAYA, Ye.V.; BELYAYEVA, A.P.;
ANDREYEVA, A.S.

Problem of poliomyelitis-like diseases. Zhur. nevr. i psikh. 63
no.10:1475-1477 '63. (MIRA 17:5)

1. Institut poliomiylita i virusnykh entsefalitov (dir. -prof.
M.P. Chumakov) AMN SSSR, Moskva.

SHESTOPALOVA, N.M.; REYNGOL'D, V.N.; GAVRILOVSKAYA, I.N.; BELYAYEVA, A.P.;
CHUMAKOV, M.P.

Electron microscopic study of the morphology and localization
of Omsk hemorrhagic fever virus in cells of the infected tissue
culture. Vop. virus. 10 no.4:425-430 J1-Ag '65.

(MIRA 18:8)

1. Institut poliomyelita i virusnykh entsefalitov AMN SSSR,
Moskva.

BELYAYEVA, A. P.

"Fast Method of Determining Sulfur in Coal and Coke," Zavod.Lab., 14, No.8, 1948

Metallurgical Factory im. Petrovskiy

22184

S/048/61/025/004/033/048
B117/B212

24,3500

AUTHORS: Sorkin, F. V., Belyayeva, A. P., and Borodin, N. S.

TITLE: Application of electroluminescence for the development of
sign indicators

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, v. 25,
no. 4, 1961, 527-529

TEXT: The present paper was read at the 9th Conference on Luminescence (crystal phosphors). It gives a report on the development of electroluminescence indicators (EL indicators). Green luminous electrolumino-phors ГИПХ (GIPKh) have been used: ZnS - 0.2% Cu, 0.05% Al. An EL sign indicator is a flat luminescent screen (condenser), one of its electrodes is a transparent conducting coating of SnO_2 ; the other electrode, a metal one, is made of a number of segments. These are produced by thermal vaporization of Al or Ag on a pattern (in a vacuum). If a voltage is applied to the common (transparent) electrode and to the corresponding segment they will start glowing. In order to assure a dependable indicator operation, a new method has been suggested for the production of

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S/048/61/025/004/033/048

B117/B212

Application of electroluminescence...

metal electrodes: In a vacuum a copper coating will be applied to the EL coating in form of powder. Then, a 10 to 15 μ thick copper coating is electrodeposited. After this, a pressure method is used. This method makes it possible to provide EL indicators with durable metal electrodes made of a galvanic copper foil. Voltage is applied to them via soldered conductors. The method suggested is also suitable for making grooved and mosaic luminescent screens and other EL equipment. Tests of the service-life of EL elements have shown that the method suggested does not impair the aging characteristics. The principal criterion to distinguish the sign at the EL-sign indicator is the contrast between sign and background. The best results to increase the contrast can be attained by decreasing the coefficient of reflection for the sign board. Calculations show that the contrast will increase strongly at a constant outer illumination if ρ is decreased. EL indicators with a small coefficient of reflection possess a thin (25 ÷ 30 μ) electroluminophor layer (mixed with plastic and nearly disappearing) which has been applied to an absorbing plastic layer colored with nigrosin. The application of sublimate phosphors is very promising. The method suggested has the advantage over light filters that not only the brightness of the background is decreased but also the halation is

Card 2/3

Application of electroluminescence...

S/048/61/025/004/033/048
B117/B212

eliminated. Sign indicators of this type can operate at a strong outside illumination ($200 \div 500$ lux). In order to test the service-life of EL indicators electroluminophors have been investigated in a solid dielectric (ЭП-096 (EP-096)). It has been found that moisture will play an important role during aging. A rapid brightness drop can be referred to an electro-chemical change of the luminophor under the influence of an electric field and moisture. Tests have shown that in order to prolong the service-life of EL indicators they have to be sealed. Covering the luminescent side of the EL indicator with epoxyde compound will protect it against moisture. There are 2 figures and 4 references: 1 Soviet-bloc and 3 non-Soviet-bloc. The three references to English language publications read as follows: S. Roberts, J. Appl. Phys., 28, no. 2, 262 (1957); G. Diemer, H. Klasens, P. Zalm, Philips Techn. Rev., 19, no. 1 (1957); P. Zalm, G. Diemer, H. Klasens, Philips. Res. Repts. 2, 81 (1951).

Card 3/3

SORKIN, F.V.; HELYAYEVA, A.P.; BORODIN, N.S.

Use of electroluminescence for designing sign indicators.
Izv. AN SSSR. Ser. fiz. 25 no.4:527-529 Ap '61. (MIRA 14:4)
(Electronic calculating machines—Input-output equipment)
(Luminescent substances)

KULEV, L.P.; GIREVA, R.N.; BELYAYEVA, A.P.

Diphenic acid esters. Part 4: Monoaryl esters of diphenic acid and their insecticide activity. Izv. TPI 126:53-54 '64. (MIRA 18:7)

L 4928-66 EWT(1)/EWA(J)/EWT(M)/EWA(D)-2 RU/US/RA

ACC NR: AT5026043

SOURCE CODE: UR/0000/65/000/000/0300/0302

AUTHOR: ^{44,55} [Kulev, L.P. ^{44,55} Deceased]; ^{44,55} Gireva, R.N.; ^{44,55} Kovaienok, A.V.; ^{44,55} Belyayeva, A.P. ³⁸

ORG: Tomsk Polytechnic Institute imeni S.M. Kirov ^{44,55} (Tomskiy politekhnicheskiy institut); ³⁸ Tomsk State University (Tomskiy gosudarstvennyy universitet)

TITLE: ^{44,55} Insecticide activity of esters of 9-fluorenone-4-carboxylic acid and their oximes ⁷

SOURCE: AN SSSR. Otdeleniye obshchey i tekhnicheskoy khimii. Biologicheskii aktivnyye soyedineniya (Biologically active compounds). Moscow, Izd-vo Nauka, 1965, 300-302

TOPIC TAGS: insecticide, organic oxime compound, keto carboxylic acid

ABSTRACT: Phenyl esters of 9-fluorenone-4-carboxylic acid were prepared by reacting the corresponding phenol with the acid in the presence of phosphoryl chloride. Chloro-substituted ethyl esters were obtained by catalytic esterification in the presence of anhydrous metal halides. Dimethylaminoethyl esters were obtained from the acid chloride and dimethylaminoethanol. The oximes were synthesized by treating the esters with hydroxylamine in an alkaline water-alcohol solution. Tests of the insecticide activity of the compounds obtained were carried out on the housefly and the rice weevil. 1-naphthyl and 2,4-dinitrophenyl esters, and oximes of 4-nitro-, 2,4-, and 2,6-dinitrophenyl esters were the most toxic compounds. It was noted that in many cases the substitution of an oxime group for the keto group increases the insecticide activity of a compound. Orig. art. has: 1 table.

SUB CODE: CB, OC, GO / SUBM DATE: 23Sep63 / ORIG REF: 003 / OTH REF: 003

Card 1/1

09011374

STEPANOVA, G.M., KOVALENKO, A.V., LEBEDEV, A.V.

Esters and ester amides of 1,2,3,4,5-pentachloro-2,3,4-trimethylbenzoic acid.
Zhur. org. khim. 1 no.8:1427-1430, 1978, 4p. (MIR) 18:11)

L 07487-67

ACC NR: AP6035843

(A,N)

SOURCE CODE: UR/0413/66/000/020/0054/0054

INVENTOR: Sorkin, F. V.; Belyayeva, A. P.

ORG: none

TITLE: Electroluminescent symbol indicator with variable glow color. Class 21, No. 187080

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 20, 1966, 54

TOPIC TAGS: electroluminescence, visible light, electronic circuit

ABSTRACT: An Author Certificate has been issued for an electroluminescent symbol indicator with variable glow color. Two electrodes are used to control the glow color of the reproduced symbols: 1) a raster screen formed from alternating luminophor strips that have different glow colors and form two comb-shaped electrode systems, and 2) conducting symbol plates that form different alphanumeric combinations.

SUB CODE: 09/ SUBM DATE: 17Jan61/ ATD PRESS: 5104

Card

1/1/mle

UDC: 621.397.132

13560* (Combination of Measures in Combating the Summer Cabbage Fly.) Kompleks meropriyati po bor'be s letnoi kapustnoi mukhol. A. S. Belaveva. *Izvestiya Natsional'nogo Peredovogo Opyta v Selskom Khozaystve* 1979, No. 10, p. 21-24.

Comparison of insecticides. Photographs, table, diagrams.

BELYAYEVA, A-S.

BELYAYEVA, A.S.

"Control of Pests and Diseases of Vegetable Crops"

Sad i Ogorod, No. 3, March 1956

Full trans in Trans No. A-741, Microfilm No. 9006535

Sovkhoz imeni M. Gor'kogo, Moscow suburb

BELYAYEVA, A.S., agronom-entomolog

Chemical methods of treating vegetable crops and the sanitary and
hygienic evaluation of these methods. Zashch.rast.ot vred.i bol.

4 no.3:32-34 My-Je '59.

(MIRA 13:4)

1. Sovkhoz imeni Gor'kogo, Moskovskoy oblasti.

(Vegetables--Diseases and pests) (Insecticides)

(Fungicides)

BELYAYEVA, A.S.

S/020/62/144/002/028/028
B144/B101

AUTHORS: Tsitsin, N. V., Academician, Cherkasskiy, Ye. S., Bushchik, T. N., Shmal'ko, V. P., Lyadova, G. L., Kilimnik, Ye. Ye., and Belyayeva, A. S.

TITLE: Latest about the struggle against cabbage maggots (Chortophila brassicae Bouché and Ch. floralis Fall.)

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 144, no. 2, 1962, 457 - 460

TEXT: A cheap insectofungicidal repellent dust ИФРД (IFRD) was prepared from by-products of the production of activated creolin (AC) and hexachloro cyclohexane (HCCN) by mixing with peat or other fillers. In 1960 excellent results were obtained in small-scale tests by dusting cauliflower, with 10-12 g of coarse-grained peat creolin dust per plant (AC - peat mixture of 1:3). Oviposition before the test, damage to roots and number of maggots during the crop were observed. One treatment was sufficient for initial oviposition (single eggs on 4-8 % of the plants); two dustings were applied at 14-day interval with massive oviposition (on 74.7 % of the plants). A finer-grained preparation was used in 1961, Card 1/3

3 3

S/O20/62/144/002/028/028
B144/B101

Latest about the struggle against

which reduced considerably the consumption. Treatment with IFRD was carried out as follows by: immersing the root before planting in 0.5, 1, and 2 % suspensions for 1-3 min; putting into peat humus pots (250, 300, 350, and 500 g per 10 kg of peat mixture); placing in the planting holes (10, 20, 50 g per hole); sprinkling the root with 50 cm³ of 3, 5, and 10 % suspension; dusting the collum (1-6 g). The latter method was the most efficient. Similar results were obtained by sprinkling with 50 cm³ of 10 % IFRD suspension, a method requiring no additional work. Considerable yield increases (2-24 tons per ha) were attained for several varieties of cauliflower and head cabbage (no. 1, Chinese, and 'Slava' cabbage) by one or two dustings with 3-6 g of IFRD after initial or massive oviposition, respectively, and by abundant, additional sprinkling to guarantee a fast penetration of the liquid. Plant and fruit were not unfavorably affected. IFRD residues in the cabbage were not found by the Sanitarno-epidemiologicheskoy stantsiya Moskv (Moscow Sanitation Epidemiological Station). IFRD is harmless to workers, and not inferior in efficiency to expensive organochlorine compounds. There are 2 tables.

Card 2/3

Latest about the struggle against ...

S/020/62/144/002/028/028
B144/B101

ASSOCIATION: Glavnyy botanicheskiy sad Akademii nauk SSSR (Main
Botanical Garden Academy of Sciences USSR); Opytno-
pokazatel'nyy sovkhoz im. Mossoveta (Experimental and Model
Sovkhoz imeni Mossovet); Sovkhoz im. A. M. Gor'kogo
(Sovkhoz imeni A. M. Gor'kiy)

SUBMITTED: February 9, 1962

Card 3/3

TSITSIN, N.V., akademik; CHERKASSKIY, Ye.S., prof.; BUSHCHIK, T.N., kand.
biolog.nauk; SHMAL'KO, V.F., kand.sel'skokhoz.nauk;
LYADOVA, G.L., agronom; KILIMNIK, Ye.Ye., agronom;
BELYAYEVA, A.S., agronom

Preparation for controlling the cabbage maggot. Zashch.
rast. ot vred. i bol. 7 no.7:33-34 JI '62. (MIRA 15:11)

1. Glavnyy botanicheskiy sad AN SSSR. Oporno-pokazatel'nyy
sovkhoz imeni ~~Moskova~~ i Sovkhoz imeni Gor'kogo.
(Moscow Province--Cabbage maggot--Extermination)
(Insecticides)

BELYAYEVA, A.S., agronom; KHIMKOVA, A.M., agronom

Protecting vegetable crops in greenhouses on the M. Gor'kii
State Farm. Zashch. rast. ot vred. 1 bol. 7 no.10:4-7 0 '62.
(MIRA 16:6)

1. Sovkhoz imeni M. Gor'kogo.
(Vegetable gardening)
(Spraying and dusting in agriculture)
(Greenhouse management)

TSITSIN, N.V., akademik; CHERKASSKIY, Ye.S.; BUSHCHIK, T.N.; SHMAL'KO, V.F.;
LYUDOVA, G.L.; KILIMNIK, Ye.Ye.; ~~BELYAYEVA, A.S.~~; Primali
uchastiye: AZIYASHVILI, L.N.; ANTONOVA, I.I.; VOLKOVA, A.A.;
DOERCHINSKAYA, I.B.; MIROSHNICHENKO, O.N.; YUZHAKOVA, N.P.

New data on the control of cabbage flies (*Chortophila brassicae*
Bouché and *Chortophila floralis* Fall.). Dokl.AN SSSR 144
no.2:457-460 My '62. (MIRA 15:5)

1. Glavnyy botanicheskiy sad AN SSSR, Opytno-pokazatel'nyy
sovkhoz im. Mossoveta i Sovkhoz im. A.M.Gor'kogo.
(Cabbage—Diseases and pests)

BELYAYEVA, A.T.; NAMAZOVA, A.A.

Significance of vectorcardiography in the evaluation of ventricular hypertrophy in patients with a defect of the interventricular septum.
Sov. med. 28 no.9:10-17 S '65. (MIRA 18:9)

1. Institut klinicheskoy i eksperimental'noy khirurgii (dir. - deystvitel'nyy chlen AMN SSSR prof. B.V.Petrovskiy) Ministerstva zdravookhraneniya RSFSR i 1-ya klinika starshego detskogo vozrasta (zav. - deystvitel'nyy chlen AMN SSSR prof. O.D.Sokolova-Ponomareva) Instituta pediatrii (dir. - dotsent M.Ya.Studenikin) AMN SSSR, Moskva.

BELYAYEVA, Anna Vasil'yevna, istorik-etnograf narodov Severa; STEBAKOVA, L.N., redaktor; STANKEVICH, A.A., tekhnicheskii redaktor

[Russians in the Far North; historical and geographical sketch of
Magadan Province] Russkie na Krainem Severe; istoriko-geografiches-
kii ocherk Magadanskoi oblasti. Magadan, Obl.kn-vo, 1955. 71 p.
(Magadan Province--History) (MLRA 9:12)

BELYAYEVA, A. Ya-author of "Relation of sulfadine urinary secretion to temperature conditions."

SO: Works of the Turkmen Sci Res Skin-Venerol Inst, Vol II, 1947, p 178-9, Unclas oh

S. BELYAYEVA, A.YE.

Burning of mercury fulminate at low pressures. A. E. Belyayev and A. E. Belyayeva (*Compt. rend. Acad. Sci. U.R.S.S.*, 1941, 83, 41-44).—The burning of Hg fulminate at pressures from 760 mm down to 2–3 mm. has been investigated. The brightness of the flame decreases considerably as the pressure is reduced, and at 8 mm it is scarcely visible. The velocity of combustion, however, is practically unaltered by pressure. At 20 mm. the vol. of gas produced in the combustion is only 15–20% of that expected if combustion had been complete, and there is a considerable deposit of Hg fulminate contaminated with Hg. An explanation of the phenomena is advanced. A. J. M.

BELYAYEV, A. V.
CA

24

Relation between the limiting density of explosives and the diameter of the charge. A. F. Belyayev and A. E. Belyayeva. Doklady Akad. Nauk S.S.S.R. 90, 293-7 (1945).--Increasing the diam. of the charge from 11 to 62.5 mm. increased the crit. d. (of detonation) of mixts. of peat flour and NH_4NO_3 from 0.7 to 1.22, depending on fineness of grinding. The greater the proportion of peat and the coarser the grinding the lower is the crit. d. When in an 80/20 mixt. of trotyl and amatol a part of the trotyl was substituted by peat while the O balance was obtained, the heat effect changed little and the change in the relation between crit. d. and diam. was analogous to that in the preceding series. With increase of the percentage of trotyl the crit. d. increased rapidly with the diam.
O. W. Willcox

CA

BOLENTYEV, A.Ye.

24

Influence of the envelope of the charge on the stability of the detonation. A. F. Bolyaev and A. R. Bolyaeva. *Doklady Akad. Nauk S.S.S.R.* 50, 299-301(1948).

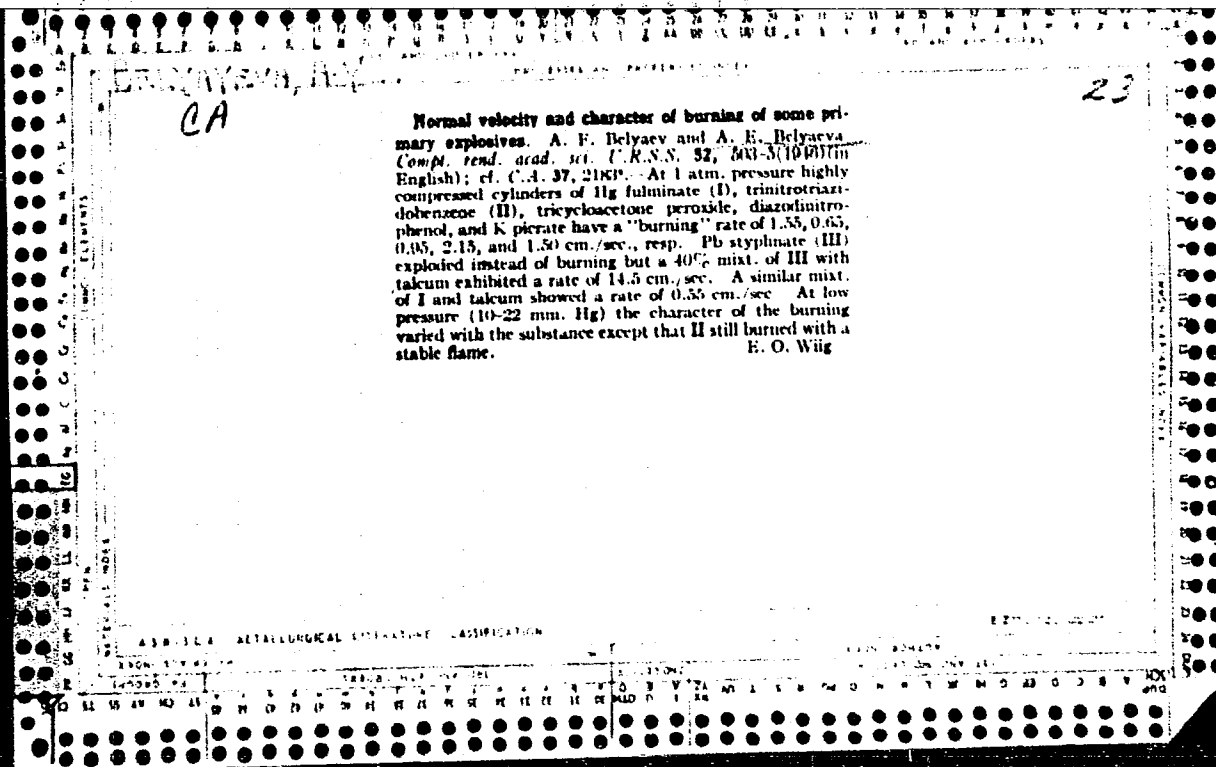
The stability (crit. point) of detonation of an explosive is approx. the same whatever may be the nature of the inert material composing the envelope (casing) of the charge, provided that the masses (weights) of the envelopes are the same; a casing of Fe having the same diam. and the same wall thickness as a casing of Pb has the weaker effect on the point of detonation and velocity of the explosion. The foregoing applies only to casings that are easily shattered, and not to massive walls of very strong materials, as steel.

O. W. Wilcox

CA
 BELYAYVA, A. Y.

The combustion of mercury fulminate. A. F. Belyayev and A. E. Belyayeva (Inst. Chem. Phys., Acad. Sci. U.S.S.R., Moscow). *J. Phys. Chem. (U.S.S.R.)* 20, 1381-9 (1946) (in Russian). -Hg(ONC)₂, compressed to d. 3.8 barus when ignited instead of exploding. The rate of combustion, which at low pressures is not accompanied by a flame, can be measured by photographing Hg(ONC)₂ tablets at definite time intervals. At 15°, the linear rate of the consumption of a tablet is $l = A + bp$. Here p is the pressure above the tablet. It is greater than the gas pressure before the ignition because the products of combustion require time to spread over the whole vessel. At very small initial pressures the added pressure is about 40 mm. Hg so that the combustion occurs at this p whatever the original degree of vacuum. If p is in kg. per sq. cm. and l is in cm./sec., $A = 0.40$ and $b = 1.40$ between $p = 40$ and 700 mm. Hg. The existence of the const. A presumably shows that some combustion takes place also in the pores of the tablet and that the gas pressure within these pores is about 300 mm. Hg. The values of A and b increase when the temp. before ignition increases, at 105° they are about 50% greater than at 10°. The temp. of the surface of the burning tablet is about 500°. The results are discussed.

J. J. Bikerman



USSR/Human and Animal Physiology. Blood.Blood Transfusions
and Blood Substitutes.

T-4

Abs Jour: Ref Zhur-Biol., No 12, 1958, 55462.

Author : Bagdasarov, A.A., Belyayeva, B.F., Rogacheva, L.S.
Inst :
Title : Hemotherapy in Radiation Sickness.

Orig Pub: Med. radiologiya, 1956, 1, No 5, 45-50.

Abstract: Dogs (54) were subjected to X-Ray irradiation, which
was given in a dose of 600 r. Blood and erythrocyte
(E) transfusions on the 5-15 day of acute radiation
sickness (RS), intensified the decay of E and made
the development of hemorrhagic diathesis more acute.
Transfusions of the protein solution of TsOLIPK [?]]
No 1 (I), combined with a complex therapy made it
possible to sharply reduce the amounts of transfused

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USSR/Human and Animal Physiology. Blood. Blood Transfusions
and Blood Substitutes.

T-4

Abs Jour: Ref Zhur-Biol., No 12, 1958, 55462.

blood and of E. Early transfusions of (I) partly reduced the development of hemolysis. Thus, deep anemia did not develop in the majority of the dogs. Fractional transfusions of the protein solution (II) partly prevented the development of a hemorrhagic syndrome and of bone marrow aplasia. Such transfusions also improved the activities of the heart and of the vessels. In acute RS the administration of a leukocytic mass (LM) of cationitic blood did not have any therapeutic effect. Combined, however, with the (I) and (II) transfusions, it increased the survival rate. Infusions were begun when a state of deep leukopenia existed, and they were given 10-11 times daily, or with an interval

Card : 2/3

USSR/Human and Animal Physiology. Blood. Blood Transfusions
and Blood Substitutes.

T-4

Abs Jour: Ref Zhur-Biol., No 12, 1958, 55462.

of 1-3 days. At the end of the third and the beginning of the fourth week after irradiation, the leukocyte count increased basically, usually at the expense of granulocytes. During the second month, it was completely restored, and at the same time the bone hematosis was normalized. In chronic RS, the infusion of LM contributed to an increase of the leukocyte count to 2,000-4,000 per 1 mm³ at the end of the treatment. In the majority of the cases the number of granulocytes and thrombocytes increased simultaneously. Thus, LM transfusions are especially useful during the periods of intensified hemolysis when blood transfusions are contraindicated. The RS treatment must be complex and individualized.

Card : 3/3

USSR/Human and Animal Physiology (Normal and Pathological).
Effects of Physical Factors. Ionizing Radiation.

T-15

Abs Jour : Ref Zhur - Biol., No 11, 1958, 51439

Author : Shamshina, Ye.V., Nikolayeva, N.V., Belyayeva, D.F.

Inst :

Title : Regeneration Processes of Bone Marrow Hematogenesis in
Acute Radiation Sickness.

Orig Pub : Probl. gemtol. i perelivaniya krovi, 1957, 2, No 2, 13-17,
63

Abstract : The role of red and white bone marrow markings in processes of hematogenetic regeneration were analysed. Functional investigation data of smears from specimen obtained through a sternal puncture of 75 dogs, who were subjected to general roentgen irradiation with a 600 r dosage (and subsequent therapy) were used. The processes were directly connected with the functional state of erythropoiesis. It is to be assumed that restoration of active

Card 1/2

BELYAYEVA, B. F.
BAGDASAROV, A. A., VINOGRADOV-FINKEL, F. K., RAUSHENBAKH, M. O., BOGOYAVLENSKAYA,
M. P., RODINA, R. I., BELYAYEVA, B. F., ABDULLAYEV, G. M. and LAGUTINA, N. Y.

"Experience of Treatment and Prophylaxis of Radiation Disease with Leucocyte
and Thrombocyte Masses."

paper to be presented at 2nd UN Intl. Conf. on the peaceful uses of Atomic Energy,
Geneva, 1 - 13 Sep 58.

BAGDASAROV, A.A., prof.; HAUSHENBAKH, M.O., prof.; ABDULLAYEV, G.M.;
BELYAYEVA, B.F.; LAGUTINA, N.Ya.

Treatment of acute radiation sickness with concentrated thrombocytes.
Probl.gemat. i perel.krovi 4 no.8:3-7 Ag '59. (MIRA 13:1)

1. Iz TSentral'nogo ordena Lenina instituta gematologii i perelivaniya
krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Bagdasarov)
Ministerstva zdravookhraneniya SSSR. 2. Deystvitel'nyy chlen AMN SSSR
(for Bagdasarov).

(BLOOD TRANSFUSION)

(RADIATION INJURY ther.)

Белыая, Б. Ф.

907/2808

PHASE I BOOK EXPLOITATION

21(a); 17(0)

International Conference on the Peaceful Uses of Atomic Energy. 24, Geneva, 1958
(Doklady sovetskikh uchebnykh; radiobiologiya i radiatsionnaya medicina
(Reports of Soviet Scientists; Radiobiology and Radiation Medicine)
Moscow, Izd-vo Glav. vpr. po Ispol'sovaniyu atomoy energii Prikladnaya
Sovetskoye Ministerstvo SNKh, 1959. 429 p. 6,000 copies printed. (Series:
Vsesoyuznyye nauchnyye konferentsii po voprosam Ispol'sovaniya atomoy energii.
Tret'ya, tom 5))

General Ed.: A.Y. Lebedevskiy, Corresponding Member, USSR Academy of Medical
Sciences; Ed.: L.S. Shilovskoy, Tech. Ed.: Ye.I. Masel'.

PURPOSE: This book is intended for physicians, scientists, and engineers
as well as for professors and students at institutes where radiobiology and
radiation medicine are taught.

COVERAGE: This is Volume 5 of a 6-volume set of reports delivered by Soviet
scientists at the Second International Conference on the Peaceful Uses of
Atomic Energy, held on September 2-13, 1958, in Geneva. Volume 5 contains
32 reports edited by Candidates of Medical Sciences S.Y. Levinitskiy and V.Y.
Medov. The reports cover problems of the biological effects of ionizing
radiation, future consequences of radiation in small doses, genetic effects
of radiation, treatment of radiation sickness, uses of radioactive isotopes
in medical and biological research, uses of atomic energy for diagnostic
and therapeutic purposes, soil absorption of uranium fission products,
their intake by plants, and their storage in plants and foodstuffs.
References accompany each report.

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Sickness (Report No. 2209) 160

Mozell, M.E., R.D. Galitern, O.J. Medvedev, M.A. Puzoshtinskaya, L.A.
Sulitskaya, and M.A. Shalimova. Effect of Ionizing Radiation and of Radio-
active Substances on the Microbe Cell (Report No. 2320) 167

Klumpke, R.F., and V.I. Shilovskoy. Local Tests to Show the State of
Hemostasis and Autoimmunity in an Irradiated Organism (Report No. 2073) 180

Podgorsky, A.A., P.A. Vlasovskiy, M.O. Reubenbakh, M.E. Kozlovskiy,
V.Y. Medov, V.Y. Medovskiy, G.M. Abuliyev, and V.A. Vasilina. Experience
in Treating Radiation Sickness With Leukocyte and Thrombocyte Substances (Report
No. 2236) 186

Kozlovskiy, A.A., and L.B. Kozlovskiy. Experiments to Determine Maximum
Permissible Thermal Neutron Flux (Report No. 2070) 196

Medvedev, S.Y., and Z.I. Ivanovskiy. Isotopic Method in Studying the Hormonal
Effect on Metabolism in Oseous Tissue (Report No. 2072) 203

Card 5/7

SUKYASYAN, G.V.; DZHAVADYAN, N.S.; NOVIKOVA, M.N.; BELYAYEVA, B.F.; PROBATOVA,
N.A.; SHIFIKOVA, M.G.

Study of the effect of transfusion of polyvinylpyrrolidone on
the course of acute radiation sickness. Probl.gemat. i perel.
krovi 4 no.3:48-55 Mr '59. (MIRA 12:6)

1. Iz TSentral'nogo ordena Lenina instituta gematologii i
perelivaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR
prof.A.A.Bagdasarov) Ministerstva zdravookhraneniya SSSR.

(ROENTGEN RAYS, inj. eff.

radiation sickness, eff. of polyvinylpyrrolidone
transfusion in animals (Rus))

(POLYVINYLPIRROLIDONE, eff.

intravenous admin., on acute radiation sickness
in animals (Rus))

BELYAYEVA, B.K., Cand Tech Sci -- (diss) "Study of
construction solutions for ~~covering works~~ ^{FACING OPERATIONS}." Kiev, 1958,
17 pp with graphs (Acad of Construction and Architecture
UKSSR. Sci Res Inst of Construction Materials and ~~Manufactures~~ ^{Manufactures})
150 copies (KL, 42-58, 115)

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1. B. N. BELYAYEVA
2. USSR (600)
4. Botany - Study and Teaching
7. Development of the concept of plants as complete organisms. Est. v. shkole no. 1
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9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

OVCHINNIKOV, N.M.; AKOPYAN, A.T.; SMELOV, N.S.; RAKHMALEVICH, E.M.;
BELYAYEVA, E.F.; ZERTSALOVA, G.N.; ZALKIN, N.M.; REZNIKOVA, L.S.;
AVAKYAN, A.A.

Data on the etiology of pemphigus. Borgyogy. vener. szemle 36 no.5:
193-200 S '60.

1. Az Orosz Szocialista Szovetsegi Koztarsasag Egeszsegugyi
Miniszteriuma Kozponti Bor-Nemikortani Intezetenek (Igazgato:
Turanov N.M., az orvostudomanyok kandidatusa es a Poliomyelitis-
kutato Intezet (Igazgato: prof. Gaumakov M.I., a Szovjet
Tudomanyos Akademia levelező tagja) kozlemenye.
(PEMPHIGUS etiol)

DOGADKIN, B.A.; BELYAYEVA, B.N.

Reaction of phenyl- β -naphthylamine with benzoyl peroxide and the effect of O-benzoyl-N-phenyl-N- β -naphthylhydroxylamine on the oxidation of rubber. Vysokom.sped. 1 no.1:123-125 Ja '59.
(MIRA 12:9)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.
(Antioxidants) (Naphthylamine) (Benzoyl peroxide)

DOGADKIN, B.A.; FEL'DSHTEYN, M.S.; BELYAYEVA, E.N.

Effect of double systems of vulcanization accelerators. Vysokom
soed. 1 no.2:254-264 F '59. (MIRA 12:10)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti,
Moskva. (Vulcanization)

1

DOGADKIN, B.A.; BELYAYEVA, E.N.

Role of free radicals in the low temperature vulcanization
(formation of structure) of rubber. Vysokom.soad. 1 no.2:
315-323 F '59. (MIRA 12:10)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.
(Rubber) - (Radicals (Chemistry)) (Vulcanization)

BELYAYEVA, E. N. Cand Chem Sci -- (diss) "Role of free radicals in the process of ^{low-temperature} ^{structuring} ~~formation of structure~~ (vulcanization) in rubber."
Mos, 1959. 10 pp (Min of Higher Education USSR. State Committee of the Council of Ministers on Chemistry. Mos Inst of Fine Chem Technology im Lomonosov. Sci Res Inst of ~~Tire~~ Industry). (KL, 52-59, 116)

81608

S/190/60/002/02/07/011
B004/B061

15.9/20

AUTHORS: Dogadkin, B. A., Fel'dshteyn, M. S., Belyayeva, E. N. ✓

TITLE: The Action of Binary Systems of Vulcanization Accelerators.
II. The Chemical Interaction of Accelerators and the
Mechanism of the Activating Action of Binary Systems

PERIODICAL: Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 2,
pp. 247-258

TEXT: The authors previously (Ref. 1) examined the action of binary
accelerator systems on the vulcanization of butadiene - styrene rubber ✓
mixtures. The action of such systems on the vulcanization of natural
rubber is studied here. The following systems were used: di-2-benzo-
thiazyl disulfide + diphenylguanidine; 2-mercaptobenzothiazole + di-
phenylguanidine; N-cyclohexyl-2-benzothiazole sulfenamide + diphenyl-
guanidine; N,N'-diethyl-2-benzothiazole sulfenamide + tetramethyl-
thiuram monosulfide. The action of these systems on the vulcanization,
the kinetics of sulfur depositing (studied in collaboration with

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The Action of Binary Systems of Vulcanization Accelerators. II. The Chemical Interaction of Accelerators and the Mechanism of the Activating Action of Binary Systems

S/190/60/002/02/07/011
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M. Krasukhina), the temperature dependence of the reactions, and the yield of 2-mercaptobenzothiazole are given in Figs. 1 - 13 and Tables 1 and 2. Fig. 14 shows microphotographs of the conversion of the sulfur which was separated by the reaction of di-2-benzothiazylidisulfide with hydrogen sulfide (taken by M. B. Rozova). The following conclusions are drawn from these data: The accelerator combinations examined can be divided, on the basis of their action during the main period of vulcanization, into a) systems with mutual activation of the accelerators; b) systems with activation of only one (the weaker) accelerator; and c) systems with additive action. The kinetics of the systems a) and b) are characterized by a delay in the initial stages of vulcanization compared with the kinetics of the separately applied components. 2-mercaptobenzothiazole is formed on the interaction of accelerators one of which contains benzothiazole groups, and the other is the hydrogen donor (e.g., di-2-benzothiazylidisulfide + diphenylguanidine). In rubber, this compound arises in all systems with mutual activation, when the

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